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First Modification Date: June 1, 2000  
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Effective Date: July 1, 2000  
Expiration Date: September 1, 2003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

Intalco Aluminum Corporation  
P.O. Box 937  
Ferndale, Washington 98248

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Facility Location:

4050 Mountain View Road  
Ferndale, Washington

Receiving Water:

Strait of Georgia  
Water Quality Class AA

Water Body I.D. No.:

WA-01-0030

Discharge Locations:

Outfall 001  
Latitude: 48 50' 26.8" N  
Longitude: 122 43' 13.6" W

Industry Type:

Primary Aluminum Smelter

Outfall 002  
Latitude: 48 50' 22" N  
Longitude: 122 42' 56.1" W

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is authorized to discharge in accordance with  
the special and general conditions which follow.

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Carol Kraege, P. E.  
Industrial Section Manager  
Solid Waste and Financial Assistance Program  
Washington State Department of Ecology

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SUMMARY OF SCHEDULED PERMIT STUDY AND REPORT SUBMITTALS

Permit Section	Study or Report	Frequency	Study Completion or Report Submittal Date
S1.F	Priority Pollutant Scan	Annually	September 1, 1999
S2.	Acute Toxicity Testing – Outfall 001	Last Year of Permit	March 5, 2003
S2.	Acute Toxicity Testing – Outfall 002	Quarterly	December 1998
S3.	Chronic Toxicity Testing – Outfall 001	Last Year of Permit	March 5, 2003
S3.	Chronic Toxicity Testing – Outfall 002	Quarterly	December 1998
S4.	Discharge Monitoring Report	Monthly	November 15, 1998
S4.J.3	Notice of Change in Authorization	as necessary	
S6.	Outfall Evaluation	Once every five (5) years	September 1, 1999
S9.B.1.	Stormwater Pollution Prevention Plans	Within 1 year of Issuance	September 1, 1999
S10.A	Sediment Sampling and Analysis Plan	Within 1 year of Issuance	September 1, 1999
S10.B	Sediment Data Report	Within 180 days of approval of S10.A	
S11.	Stormwater Characterization Study Plan	Within 1 year of Issuance	September 1, 1999
S11.	Stormwater Sampling		May 1, 2001
S11.	Stormwater Data Report	Within 60 days of completing sampling	July 1, 2001
G17.	Application for permit renewal	1/permit cycle	March 5, 2003

SUMMARY OF SCHEDULED PERMIT STUDY AND REPORT SUBMITTALS (CONT.)

<b>Permit Section</b>	<b>Study or Report</b>	<b>Frequency</b>	<b>Study Completion or Report Submittal Date</b>
S1.D	Engineering study for Chlorination	Prior to Construction	Before December 31, 2001
S7.	Stormwater Pond Operational Plan		December 1, 2000
S7.	Stormwater Pond Engineer Report		December 1, 2000
S9.A.4	Potline Ditch Cleaning Schedule		July 1, 2000
S9.A.5	Aluminum and Fluoride Source Study Report		September 1, 2000
S9.A.5	Study Report for Potroom Roof Run-off Collection, Treatment, Reduction, or Elimination		December 1, 2000

Note: Refer to the Special and General Conditions of this permit for additional submittal requirements.

## SPECIAL CONDITIONS

### S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### A. Basis of Limitations

Best Professional Judgment (BPJ) was used in establishing the effluent limitations of this permit for toxics, conventional, and nonconventional pollutants.

#### B. Process Wastewater Limitations - Outfall # 001

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge process and domestic wastewater at the permitted location subject to meeting the following limitations:

Parameter	Units	Effluent Limitations: Outfall # 001		Monitoring Frequency	Sample Type
		Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>		
Total Suspended Solids <sup>h, i</sup>	lbs/day mg/l	150 10	185	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Fluoride <sup>l</sup>	lbs/day	68	296	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Aluminum <sup>h, i</sup>	lbs/day	10.3	30	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Copper <sup>j</sup>	ug/l	--	--	Weekly	Grab
Free Cyanide <sup>c</sup>	mg/l	<0.012	0.012	Daily <sup>f</sup>	Grab
Benzo(a)Pyrene <sup>d</sup>	mg/l	<0.01	0.01	Monthly	24 hr comp <sup>g</sup>
Oil and Grease	mg/l	5	10	Daily <sup>f</sup>	Grab
pH <sup>e</sup>		Daily Minimum 6.0	Daily Maximum 9.0	Continuous	Meter
Temperature	°F	--	--	Continuous	Continuous
Flow	MGD	--	--	Continuous	Continuous
Production	tons/day	--	--	Daily Average	

<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. For calculating average concentrations, all data above the Method Detection Level (MDL) shall be used and all data below MDL shall be counted as zero.

<sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge.

<sup>c</sup> The method for free cyanide analysis shall be Weak Acid Dissociable Cyanide, Method 4500-CN I., Standard Methods for the Examination of Water and Wastewater, 19th Edition. Daily measurements below 0.020 mg/l shall be deemed to demonstrate compliance with the daily maximum limit for cyanide.

<sup>d</sup> During benzo (a)pyrene composite collection, priority pollutant cleaned sampling per 40 CFR Part 136, App. A, Method 625, shall be used. The composite sample shall be refrigerated in the dark during collection. Measurements below the quantitation level (QL) shall be interpreted as in compliance with the limit.

<sup>e</sup> Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly. No individual excursions from the pH range of 6.0 to 9.0 shall exceed sixty (60) minutes. Total excursions outside of the range of 6.0 to 9.0 shall not exceed seven (7) hours and twenty-six (26) minutes per month.

<sup>f</sup> Daily is defined as monitoring seven days per week.

<sup>g</sup> A 24-hr comp sample is defined as a 24-hour flow proportional composite sample.

<sup>h</sup> This limit is the net value to be reported on the DMR Form 3320-1. The permittee will also report on the summary sheet (submitted with the DMR), the daily TSS and aluminum concentration (mg/l) and mass (lbs/day) for 1.) the intake water, 2.) the total effluent values at outfall 001, and 3.) the net values. When the net value is less than zero, zero will be used for reporting and calculating the monthly average. If study results shows the effluent results in environmental degradation the permit will be reopened and the netting out provision will be removed.

<sup>i</sup> The permittee shall collect 24-hr composite samples from the secondary treatment plant effluent beginning December 1, 1999. The permittee shall analyze the samples for Total Suspended Solids (TSS), Fluoride, Aluminum, and flow. The monitoring data will be reported monthly on a summary sheet (as described in footnote h above) and attached to the monthly DMR report. Anytime after two years from the amendment of the permit, Ecology may propose to set new effluent limits at the secondary treatment plant for TSS, aluminum and fluoride. Limits will be dropped at the current monitoring point and the monitoring frequency at the old site will be weekly for these parameters.

<sup>j</sup> The permittee shall continue to monitor total recoverable copper until September 1, 2000. After reporting two years of weekly monitoring data (September 1, 1998 to September 1, 2000), Ecology will run a "reasonable potential to exceed" analysis. If there is a "reasonable potential to exceed" for copper, a limit will be imposed. If not, no further copper monitoring will be required except in the annual priority pollutant scan (Permit Condition S1.F).

C. Stormwater Discharge Limitations - Outfall # 002

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater at the permitted location subject to meeting the following limitations:

Parameter	Units	Effluent Limitations: Outfall # 002		Monitoring Frequency	Sample Type
		Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>		
Total Suspended Solids <sup>i,j</sup>	mg/l	35	75	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Fluoride <sup>i,j</sup>	mg/l	35	50	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Aluminum <sup>i,j</sup>	mg/l	10	15	Daily <sup>f</sup>	24 hr comp <sup>g</sup>
Copper <sup>h</sup>	ug/l	--	--	Weekly	Grab
Free Cyanide <sup>c</sup>	mg/l	--	--	Weekly	Grab
Benzo(a)Pyrene <sup>d,j</sup>	mg/l	--	<0.01	Monthly	24 hr comp <sup>g</sup>
Oil and Grease <sup>j</sup>	mg/l	5	10	Daily <sup>f</sup>	Grab
		<b>Daily Minimum</b>	<b>Daily Maximum</b>		
Temperature <sup>j</sup>	F	--	--	Continuous	Continuous
pH <sup>e,j</sup>		6.0	9.0	Continuous	Meter
Flow <sup>j</sup>	MGD	--	--	Continuous	Continuous

<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. . For calculating average concentrations, all data above the Method Detection Level (MDL) shall be used and all data below MDL shall be counted as zero.

<sup>b</sup> the maximum daily effluent limitation is defined as the highest allowable daily discharge.

<sup>c</sup> The method for free cyanide analysis shall be Weak Acid Dissociable Cyanide, Method 4500-CN I., Standard Methods for the Examination of Water and Wastewater, 19th Edition. If Intalco detects cyanide in any sample above 0.005 milligrams per liter, Intalco shall, within 24 hours of notification of the sample data, perform additional monitoring to confirm the presence of cyanide in the effluent. Intalco shall secure an immediate call down agreement with any labs that perform analyses of cyanide for Outfall 002 in order to insure that Intalco receives immediate notification of any cyanide detected in any sample above 0.005 milligrams per liter. If the follow-up sampling confirms the presence of cyanide in the effluent Intalco shall, within 3 days of notification of the follow-up sample data, initiate an investigation to determine the



source of the cyanide, and within 30 days of notification of the follow-up sample data shall propose remedial measures to eliminate any detected cyanide. Intalco shall implement the remedial measures upon Ecology's approval of same.

<sup>d</sup> During benzo (a)pyrene composite collection, priority pollutant cleaned sampling per 40 CFR Part 136, App. A, Method 625, shall be used. The composite sample shall be refrigerated in the dark during collection. . Measurements below the quantitation level (QL) shall be interpreted as in compliance with the limit.

<sup>e</sup> indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly. No individual excursions from the pH range of 6.0 to 9.0 shall exceed sixty (60) minutes. Total excursions outside of the range of 6.0 to 9.0 shall not exceed seven (7) hours and twenty-six (26) minutes per month.

<sup>f</sup> Daily is defined as monitoring seven days per week.

<sup>g</sup> A 24-hr comp sample is defined as a 24-hour flow proportional composite sample.

<sup>h</sup> The permittee shall continue to monitor total recoverable copper until September 1, 2000. After reporting two years of weekly monitoring data (September 1, 1998 to September 1, 2000), Ecology will run an "reasonable potential to exceed" analysis. If there is a "reasonable potential to exceed" for copper, a limit will be imposed. If not, no further copper monitoring will be required except in the annual priority pollutant scan (Permit Condition S1.F).

<sup>i</sup> These limits have been modified due to the uncertainty of the off site contributions. These limits do cause the permittee to develop and implement additional "Best Management Practices" for the stormwater collection system (see S7. and S9.). The permittee shall also collect 24-hr composite samples from the stormwater pond effluent beginning no later than December 1, 2001. The permittee shall analyze the samples for Total Suspended Solids, Fluoride, Aluminum, pH, and flow. The monitoring data shall be reported monthly on a summary sheet (as described in footnote j below) and attached to the monthly DMR report. After two years of data, Ecology may establish new limits for these parameters at the stormwater pond.

<sup>j</sup> These limits are to be reported on the DMR Form 3320-1. The permittee shall also report on the summary sheet (submitted with the DMR); 1.) the daily TSS, fluoride, and aluminum concentration (mg/l) 2.) daily oil and grease, temperature, pH, and flow values, and 3.) weekly copper and cyanide values.

D. Sanitary Treatment Plant Discharge Limitations

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge domestic wastewater at the permitted location subject to meeting the following limitations:

Parameter	Units	Effluent Limitations: Sanitary Plant Discharge	Monitoring Frequency	Sample Type
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		<b>30-Day Average <sup>a</sup></b>	<b>7-Day Average <sup>b</sup></b>		
Biochemical Oxygen <sup>c</sup> Demand (5 day BOD)	mg/l lbs/day	45.0 22.4	65.0 32.4	Weekly <sup>f</sup>	24 hr comp <sup>d</sup>
Total Suspended <sup>c</sup> Solids (TSS)	mg/l lbs/day	45.0 22.4	65.0 32.4	2/Week	24 hr comp <sup>d</sup>
Fecal Coliform <sup>e</sup>	# /100 mls	200	400	Weekly <sup>f</sup>	Grab

**AND**

		<b>Minimum</b>	<b>Maximum</b>		
Flow	MGD	--	--	Continuous	Continuous
Chlorine <sup>h</sup>	mg/l	0.1	1.5	Daily <sup>g</sup>	Grab
pH <sup>i</sup>		6.0	9.0	Daily	Grab

<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

<sup>b</sup> The 7-Day Average effluent limitation is defined as the highest allowable discharge rate for 7 consecutive days, calculated as the average of all samples taken during the seven day interval.

<sup>c</sup> In addition, the 30-day average percent removal for 5-day BOD and TSS shall not be less than 65 percent.

<sup>d</sup> A 24-hr composite sample is defined as a 24-hour flow or time proportional composite sample.

<sup>e</sup> Any exceedance of the Fecal Coliform 7-Day Average limit will require daily sampling until the values have been below the 7-Day Average limit for three consecutive days. The starting date of the additional sampling will begin as soon as the permittee is aware of an exceedance, which shall be no later than 2 days after the exceedance sampling.

<sup>f</sup> Weekly is defined as once per week.

<sup>g</sup> Daily is defined as monitoring seven days per week.

<sup>h</sup> The minimum value is an instantaneous value never to drop below. The 1.5 mg/l chlorine limit shall be in effect until December 31, 2002. By December 31, 2001, the permittee shall submit to Ecology an engineering study on its proposed technology to meet the 0.5 mg/L chlorine limit. The permittee shall submit to Ecology for approval any modification plans per WAC 173-240 before construction commences. If the permittee elects to retain the chlorination system, the new maximum chlorine limit (effective January 1, 2003) shall be 0.5 mg/l.

<sup>i</sup> Indicates the range of permitted values at all times.

NOTE: Intalco is required to have a Certified Operator for operation of the sanitary treatment plant.

E. Temporary Curtailment

During periods of temporary curtailment of smelting operations, the Permittee may petition the Department in writing to reduce or eliminate effluent monitoring and reduce the percent removal effluent limitation for the sanitary treatment facility. Curtailment is defined as the shut down of 90% or more of potline operations. Upon start up of the curtailed smelting operations, all NPDES requirements shall revert to those in the current permit.

F. Whole Effluent Toxicity (WET) Testing

WET testing was required during the previous permit cycle and indicated that a reasonable potential exists at outfall 002 to cause receiving water toxicity. Therefore the Permittee shall perform WET monitoring and tests from outfall 002. The specific WET testing is found Sections S2 and S3.

The testing shall meet the quality assurance criteria in the most recent versions of the EPA manuals (EPA/600/4-90/027F, EPA/600/4-89/001, EPA/600/R-95/136, and EPA/600/4-91/003) and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.

G. Priority Pollutant Testing

The Permittee shall perform an annual priority pollutant scan for their wastewater effluent at outfalls 001 and 002. The test method and detection levels shall be in accordance with the latest version of the Department of Ecology's Permit Writer's Manual. Testing shall be performed during normal operations and flow regime. Total recoverable copper shall be included in the priority pollutant metal scan.

H. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

Chronic Mixing Zone

Outfall # 001:

The length of the chronic mixing zone shall extend in any horizontal direction from the discharge ports for two hundred (200) feet plus the depth of the diffuser, which is seventeen (17) feet for a total of two hundred and seventeen (217) feet.

The edge of the chronic mixing zone shall also be at least 100 feet from the

shoreline at mean lower low water. The dilution ratio at the edge of this chronic zone has been calculated to be 60 to 1 (60:1). This information was supplied as a requirement of the previous permit and approved by Ecology.

Outfall # 002:

The length of the chronic mixing zone shall extend in any horizontal direction from the discharge for two hundred (200) feet plus the water depth at the end of the pipe, which is seven (7) feet for a total of two hundred and seventeen (207) feet. The edge of the chronic mixing zone shall also be at least 100 feet from the shoreline at mean lower low water. The dilution ratio at the edge of this chronic zone has been calculated to be 24 to 1 (24:1). This information was supplied as a requirement of the previous permit and approved by Ecology.

Acute Mixing Zone

Outfall # 001:

The acute mixing zone is ten percent (10%) of the chronic zone as previously defined. This zone shall be twenty-two (22) feet in any spatial direction from any discharge port. The dilution ratio for the acute zone has been calculated to be 50 to 1 (50:1). This information was supplied as a requirement of the permit and approved by Ecology

be  
previous

Outfall # 002:

The acute mixing zone is ten percent (10%) of the chronic zone as previously defined. This zone shall be twenty-one (21) feet in any spatial direction from any discharge port. The dilution ratio for the acute zone has been calculated to be 8 to 1 (8:1). This information was supplied as a requirement of the previous permit and approved by Ecology

**S2. ACUTE TOXICITY**

A. Effluent Limit for Acute Toxicity

Process wastewater Outfall 001 (SP-10):

There is no acute toxicity limit established for outfall 001. The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.

The two species listed in subsection B shall be used on each sample and the results submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. The percent survival in 100% effluent shall also be reported.

Stormwater Outfall 002 (D-10):

The effluent limit for acute toxicity is no acute toxicity detected in an 11% effluent concentration.

The 11% effluent concentration is the acute critical effluent concentration (ACEC), which means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1. of this permit.

In the event of failure to pass the test described in subsection B. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity so long as the requirements in subsection C. are being met to the satisfaction of the Department.

B. Monitoring for Compliance With an Effluent Limit on Outfall 002 (D-10)

The Permittee shall conduct monitoring of outfall 002 to determine compliance with the effluent limit for acute toxicity. The acute toxicity tests shall be performed using 100% effluent, the ACEC, and a control.

Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. Testing shall begin within 60 days of the permit effective date.

A written report shall be submitted to the Department within 60 days after each of the test results is final. The percent survival in 100% effluent shall be reported along with all compliance monitoring results.

Compliance monitoring shall be conducted quarterly using each of the species and protocols listed below on a rotating basis:

- 1) Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA/600/4-90/027F)
- 2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/600/4-90/027F).

If any acute toxicity test for outfall 002 determines a statistically significant difference in survival between the control and the 11% effluent concentration (the ACEC) using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001), then the effluent has failed the whole effluent acute toxicity limit. The permittee shall be considered in compliance with all permit requirements for acute whole effluent toxicity so long as the requirements in subsection C are being met to the satisfaction of the Department. If the difference in survival between the control and the 11% effluent concentration is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

C. Response to Noncompliance With the Effluent Limit on Outfall 002 (D-10)

If a toxicity test on outfall 002 conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the ACEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall be an 11% effluent, which will be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for acute toxicity as described in subsection B.

The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous.

If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection.

The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department.

The report shall address possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with Department comments, within 30 days after receipt of the Department's comments. The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

D. Sampling and Reporting Requirements

1. All reports for compliance monitoring, additional monitoring and testing shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content (Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* ). Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manuals listed in S2.B. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA method 600/4-90/027F. Dilution water for toxicity testing shall be of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC. The ACEC may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration. The ACEC for outfall 001 is a 2% effluent concentration.
8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.



### **S3. CHRONIC TOXICITY**

#### **A. Effluent Limit for Chronic Toxicity**

##### **Process Wastewater Outfall 001 (SP-10):**

There is no chronic toxicity limit for outfall 001. The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.

All of the chronic toxicity tests listed below in subsection B shall be conducted on each sample. The results of this chronic toxicity testing shall be submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. This series of dilutions shall include 2 % effluent concentration (the ACEC). The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

##### **Stormwater Outfall 002 (D-10):**

The effluent limit for chronic toxicity is no toxicity detected in a 4% effluent concentration.

A 4% effluent concentration is the chronic critical effluent concentration (CCEC) which means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1. pursuant to WAC 173-201A-100.

In the event of failure to pass the test described in subsection B. of this section for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity so long as the requirements in subsection C. are being met to the satisfaction of the Department.

#### **B. Monitoring for Compliance With an Effluent Limit on Outfall 002 (D-10)**

The Permittee shall conduct monitoring to determine compliance with the effluent limit for chronic toxicity. The chronic toxicity tests shall be performed using a 4% effluent concentration (the CCEC), a 11% effluent concentration (the ACEC), and a control. Chronic toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. Testing shall begin within 60 days of the permit effective date.

A written report shall be submitted to the Department within 60 days after each of the test results is final. This written report shall contain the results of hypothesis testing conducted as described in this subsection using both the ACEC and CCEC versus the control.

Compliance monitoring shall be conducted quarterly rotating between a bivalve and a vertebrate test using the species and protocols listed below:

Saltwater Chronic Toxicity Test Species		Method
Top Smelt	<i>Atherinops affinis</i>	EPA/600/R-95/136
Pacific oyster	<i>Crassostrea gigas</i>	EPA/600/R-95/136 (or)
Mussel	<i>Mytilus sp.</i>	EPA/600/R-95/136

The Permittee shall use the West Coast fish (Top Smelt, *Atherinops affinis*) for toxicity testing unless the lab cannot obtain a sufficient quantity of a West Coast species in good condition in which case the East Coast fish (Silverside minnow, *Mendidia beryllina*, EPA/600/4-91/003) may be substituted.

The Pacific oyster and mussel tests shall be run in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or the most recent version thereof.

If any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001), then the effluent has failed the whole effluent chronic toxicity limit. The permittee shall be considered in compliance with all permit requirements for chronic whole effluent toxicity so long as the requirements in subsection C are being met to the satisfaction of the Department. If the difference in response between the control and the 4% effluent concentration is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the 11% effluent concentration and the control.

C. Response to Noncompliance With an Effluent Limit on Outfall 002 (D-10)

If a toxicity test conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the 4% effluent concentration and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results.

This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall be 4% effluent and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection B.

The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan.

The Permittee shall submit a revised TI/RE plan, in accordance with Department comments, within 30 days after receipt of the Department's comments.

The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

D. Sampling and Reporting Requirements

1. All reports for compliance monitoring and additional monitoring shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content (Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*). Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted as electronic files on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.
2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual or other test method listed in subsection B. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in subsection B. Dilution water for toxicity testing shall be of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration.
8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

#### S4. MONITORING AND REPORTING

The Permittee shall monitor and report in accordance with the following conditions.

##### A. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department.

In addition, a summary sheet, listing each test results for the parameters listed in section S1., MDLs, and QLs (when applicable), shall be submitted to the Department. The report and summary sheet shall be sent to the Department of Ecology, Industrial Section, P. O. Box 47706, Olympia, Washington 98504-7706. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month. Monitoring results obtained during the month shall be summarized on the Discharge Monitoring Report (DMR) Form (EPA 3320-1) and submitted no later than the 15th day of the following month, unless otherwise specified in this permit.

Monitoring results of the sanitary treatment system, specified in Section S1., shall be reported on Form ECY 040-2-33 or EPA form 3320-1. This report shall accompany the summary report above.

B. Records Retention

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years.

This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

After a portion of the composite sample is removed for the Permittee's analysis, the remainder, a 4-8 liter (minimum), shall be retained until noon. This sample shall be kept refrigerated at 4° centigrade in the dark.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by the Department.

F. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.



G. Laboratory Accreditation

All monitoring data, except for flow, temperature, settleable solids, conductivity, pH, and internal process control parameters, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

H. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit (S1.) using test procedures specified by this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

I. Sanitary Plant Operator Certification

All operators responsible for facilities that treat sanitary waste, or a combination of sanitary, commercial, or industrial waste shall be certified in accordance with the provisions of Chapter 70.95B RCW and Chapter 173-230 WAC within 180 days of the issuance date of this permit.

J. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified in accordance with the provisions of 40 CFR Part 122.22.

1. All permit applications shall be signed by either a responsible corporate official, a general partner of a partnership, or the proprietor of a sole proprietorship.
2. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department, and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)



3. Changes to authorization. If an authorization under paragraph J.2.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of J.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall update the solid waste control plan within 18 months of the issuance of this Permit. The Permittee shall have the updated plan available for review on site at all times. This plan shall include all solid wastes with the exception of those solid wastes regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The plan shall include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.

This plan shall not be at variance with any approved local solid waste management plan. The Permittee shall comply with the plan and any modifications thereof.

S6. OUTFALL EVALUATION

The Permittee shall inspect, once per permit cycle within the first year of the permit, the submerged portion of both outfall lines and diffusers to document its integrity and continued function. A inspection report shall be submitted to the Department within 90 days after completion of each inspection. A photographic video verification shall be included in the report.

S7. PROCESS WASTEWATER, STORMWATER, AND SANITARY WASTEWATER TREATMENT SYSTEM OPERATING PLANS

The wastewater treatment systems shall be operated according to procedures and criteria described in an operating plan. This plan shall be updated and maintained on site within 180 days of the date of the issuance date of this permit. The plan shall include, but is not limited to, the following:

A baseline operating condition which describes the operating parameters and procedures used to meet the effluent limitations of S1. at the production levels used in developing these limitations.

In the event of production levels which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.

A description of any regularly scheduled maintenance or repair activities at the permitted facilities which would affect the volume or character of the wastes discharged; a list including quantities and chemical compositions of any maintenance-related substances (such as cleaners, degreasers, solvents, etc.) that will be discharged, and a plan for monitoring and treating/controlling the discharge of maintenance-related materials.

The permittee shall also develop an operational plan for the stormwater pond. This plan shall be completed and maintained on site by December 1, 2000. The operational plan shall include the evaluation and proper setting of the overflow weir boards in the overflow structures. The plan shall include, but is not limited to, the following:

A baseline operating condition which describes the operating parameters and procedures used to meet the effluent limitations of S1.C. at the production levels used in developing these limitations.

In the event of production levels which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and

conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.

The operational plan for the stormwater pond shall provide a description of any regularly scheduled maintenance or repair activities at the permitted facilities which would affect the volume or character of the wastes discharged; a list including quantities and chemical compositions of any maintenance-related substances (such as debris, sweepings, wash down, etc.) that will be discharged, and a plan for monitoring and treating/controlling the discharge of maintenance-related materials.

The permittee shall also submit an "as built" engineering report and the designed efficiency (TSS removal) for the stormwater pond. This report shall be submitted to Ecology by December 1, 2000.

These plans shall be updated to include requirements for any major modifications of the treatment systems.

#### S8. SPILL PLAN

The Permittee shall update the existing Spill Control Plan no later than 18 months after Permit issuance and keep it on site. It must include site spill control plans for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters.

The Permittee shall review and update the Spill Plan and for any major modifications. The plan and any supplements shall be followed throughout the term of the permit. An updated plan shall be submitted with the application for renewal, 180 days prior to expiration of the permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.

- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals required by 40 CFR Part 112, and contingency plans required by Chapter 173-303 WAC may be used.

S9. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The definitions of terms used in this section are provided in the guidance document entitled *Stormwater Pollution Prevention Planning for Industrial Facilities*, which is published by the Department of Ecology.

A. Plan Development Deadlines

The Permittee shall develop, implement, and comply with a SWPPP in accordance with the following schedule:

1. Within one year of permit issuance, develop a SWPPP and retain it on-site.
2. Within one hundred and eighty (180) days of receipt of Ecology's comments on the SWPPP, complete the implementation of *operational BMPs* and applicable *source control BMPs*, as required under this Special Condition, which do not require *capital improvements*.
3. Within one and one half years (545 days) of receipt of Ecology's comments on the SWPPP, complete the implementation of BMPs.
4. By July 1, 2000, the permittee shall amend the SWPPP to include a BMP with a specific schedule for regular cleaning of alumina and other debris from the potline ditches. The schedule shall be submitted to and approved by Ecology. This BMP shall be implemented immediately.
5. The permittee shall conduct a study to determine the contributions of aluminum and fluoride to the stormwater system from stormwater runoff from the roofs of the potroom buildings. A report shall be submitted to Ecology by September 1, 2000. If the stormwater runoff from the roofs of the potroom buildings contributes aluminum and fluoride to the stormwater system, the permittee shall study ways to collect, treat, reduce or eliminate the source and shall submit a report to Ecology by December 1, 2000. This study requirement can be satisfied through others means (i. e. a WET TI/RE) with Ecology's approval.

The guidance for development of a SWPPP is available from the Permit Coordinator, Industrial Section, Headquarters Office, Olympia, Washington 98504.

B. General Requirements

1. Submission, Retention and Availability:

The Permittee shall submit a copy of the SWPPP to the Department within one year of permit issuance, for review and comment. The SWPPP and all of its modifications shall be signed in accordance with Special Condition S4.J. Retain the SWPPP on-site or within reasonable access to the site.

2. Modifications:

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation or maintenance which causes the SWPPP to be less effective in controlling the pollutants.

Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within two (2) weeks of such determination.

Other than for modifications for inadequate measures and/or controls, any other proposed modifications to the SWPPP shall be submitted to the Department at least 30 days in advance of implementing the proposed changes in the plan unless Ecology approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.

4. The Permittee shall prepare and maintain the SWPPP in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities*. The plan shall contain the following elements:

- a. Assessment and description of existing and potential pollutant sources,
- b. A description of the operational BMPs,
- c. A description of selected source-control BMPs,
- d. When necessary, a description of the erosion and sediment control BMPs,
- e. When necessary, a description of the treatment BMPs, and
- f. An implementation schedule.

C. Implementation

The Permittee shall conduct two inspections per year; one during the wet season (October 1 - April 30) and the other during the dry season (May 1 - September 30).

1. The wet season inspection shall be conducted during a rainfall event by personnel named in the Stormwater Pollution Prevention Plan (SWPPP) to verify that the description of potential pollutant sources required under this permit is accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate.

The wet-weather inspection shall include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).

2. The dry season inspection shall be conducted by personnel named in the SWPPP. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify the Department.

D. Plan Evaluation

The Permittee shall evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed.

A record shall be maintained summarizing the results of inspections and a certification, in accordance with Condition S4.J., that the facility is in compliance with the plan and this permit and identifying any incidents of noncompliance.

S10. SEDIMENT MONITORING STUDY

The permittee shall submit to the Department for review and approval a Sediment Sampling and Analysis Plan for characterization of sediment in the vicinity of outfalls 001 and 002. The permittee will submit this plan within the first year of the permit. The purpose of the plan is to characterize the sediment quality in the vicinity of the diffuser and/or end of each outfall.

Following the Department approval of the Sediment Sampling and Analysis Plan, sediments will be collected and analyzed.

The permittee will submit to the Department a Sediment Data Report containing the results of the sediment sampling and analysis within 180 days from the Departments approval of the plan.

A. Sediment Sampling and Analysis Plan

1. The permittee shall prepare a Sediment Sampling and Analysis Plan from the following guidance:

Sediment Source Control Standards Users Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995).

2. The Sediment Sampling and Analysis Plan shall include 6 - 10 discrete sampling stations in the vicinity of each outfall. These sampling stations shall not include the required reference and ambient stations.

B. Sediment Data Report

1. The permittee shall submit a Sediment Data Report conforming with the approved Sampling and Analysis Plan.

S11. STORMWATER CHARACTERIZATION STUDY

The permittee shall submit a stormwater sampling and analysis plan to the Department for review and approval. The permittee shall submit this plan within the first year of the permit.

The purpose of the plan is to characterize the stormwater pond performance to determine the stormwater pond's pollutant contribution to Outfall 002 versus off-site contributions.

Following the Department approval of the plan, stormwater samples shall be collected and analyzed for total suspended solids, aluminum, fluoride, copper, oil and grease, B(a)P, cyanide, plus any other pollutant the permittee believes is present in Outfall 002 that may come from an off-site source. In addition, the permittee shall determine the removal efficiency of the stormwater pond for removal of total suspended solids, aluminum, fluoride, copper, oil and grease, B(a)P, and cyanide.

Two sampling periods shall be evaluated. One will be for storm events during the wet weather storm season (Oct.-Mar.) and the other during the dry weather storm season (Apr.-Sep.). A minimum of ten samplings (at least one week apart) of the stormwater

pond influent, effluent, and each run-on/run-off ditch shall be conducted for each type of storm season. The sampling shall be completed by no later than May 1, 2001.

The permittee shall submit to the Department a report containing the results of the stormwater sampling and analysis by July 1, 2001.



## GENERAL CONDITIONS

### G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

### G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

### G3. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

### G4. NONCOMPLIANCE NOTIFICATION

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department with the following information:

- A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;
- B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify the Department by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 122 requires that the information specified in Sections G4.A., G4.B., and G4.C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

#### G5. BYPASS PROHIBITED

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;
- C. The Permittee submits notice of an unanticipated bypass to the Department in accordance with Condition G4. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the Department, if possible, at least 30 days before the date of bypass (or longer if specified in the special conditions);
- D. The bypass is allowed under conditions determined to be necessary by the Department to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

G6. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
- B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

G7. PERMIT MODIFICATIONS

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

G8. PERMIT MODIFIED OR REVOKED

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause including, but not limited to, the following:

- A. Violation of any terms or conditions of the permit;

- B. Failure of the Permittee to disclose fully all relevant facts or misrepresentations of any relevant facts by the Permittee during the permit issuance process;
- C. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;
- D. Information indicating that the permitted discharge poses a threat to human health or welfare;
- E. A change in ownership or control of the source; or
- F. Other causes listed in 40 CFR 122.62 and 122.64.

Permit modification, revocation and reissuance, or termination may be initiated by the Department or requested by any interested person.

#### G9. REPORTING A CAUSE FOR MODIFICATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G8. or 40 CFR 122.62 must report such plans, or such information, to the Department so that a decision can be made on whether action to modify or revoke and reissue a permit will be required. The Department may then require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

#### G10. TOXIC POLLUTANTS

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Department shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

#### G11. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plan.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G14. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G15. REVOCATION FOR NONPAYMENT OF FEES

The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G16. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G17. DUTY TO REAPPLY

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.